

CLAIMS

I Claim:

1. A method of making an artificial tooth for placement in a denture comprising the steps of:

- 1) making a mold form of the desired configuration;
- 2) inserting in the mold form a thin layer polycarbonate dimethacrylate incisal material and forcing said material into the contour of the mold;
- 3) subjecting said thin layer to a curing step including a first time segment of vacuum followed by a second time segment of vacuum and light curing including heat;
- 4) adding additional thin layers of incisal material and subjecting each layer to the curing process of step 5) until the mold is full;
- 5) removing the tooth from the mold form and subjecting the tooth to the curing step described in step 3) to complete the tooth.

2. A method as claimed in claim 1 wherein following step 9) said tooth is inspected for voids and any such voids are filled with polycarbonate dimethacrylate material.

3. A method as claimed in claim 1 wherein retention holes are formed in the lower part of said tooth.

4. A method as claimed in claim 2 wherein following filling any voids in said tooth, said tooth is lightly blasted with abrasive and rinsed in distilled water in ultrasonic cleaner.

5. A method as claimed in claim 4 wherein following said rinsing step said tooth is glazed and further cured in a substantially oxygen-free atmosphere and light for approximately nine minutes.

6. A method of manufacturing an artificial tooth for placement in a denture comprising the steps of:

- 1) making a form tooth ~~mold~~;
- 2) placing the form tooth in a mold form of impression material;
- 3) removing the form tooth ~~mold~~ from the mold form after the form tooth ~~mold~~ has been in the mold form for at least substantially ten minutes;
- 4) inserting in the mold form a thin layer polycarbonate dimethacrylate incisal material and forming said material into the contour of the mold;
- 5) subject said thin layer to a five minute vacuum of approximately 27 in. of Hg followed by a three-minute segment of approximately 29 in. of Hg vacuum and light curing including heat;
- 6) add additional layers of 2 mm or more thickness and subject each layer to the curing process of step 5) until the mold is full;
- 7) removing the tooth from the mold form and subjecting the tooth to the curing step described in step 5).

8. A method as claimed in claim 6 wherein following step 9) said tooth is inspected for voids and any such voids are filled with polycarbonate dimethacrylate material.

9. A method of manufacturing an artificial tooth for placement in a denture comprising the steps of:

- 1) making a mold of the desired tooth;
- 2) making a mold form of impression material, such as Panasil Contact Plus™ or equal;
- 3) placing a small layer of impression material on the surface of the tooth mold;
- 4) pushing the mold into the mold form up to the base and laving the bottom and glue area exposed;
- 5) removing the tooth mold from the mold form after the tooth mold has been in the mold form for at least substantially ten minutes;
- 6) inserting in the mold form a thin layer of indirect composite material and forcing said material into the contour of the mold;
- 7) subjecting said thin layer to a five minute vacuum of approximately 27 of Hg followed by a three-minute segment of approximately 29 in. of Hg vacuum and light cure;
- 8) add additional layers of indirect composite material and subject each layer to the curing process of step 8) until the mold is full;

9) removing the tooth from the mold form and subjecting the tooth to the curing step described in step 78).

9. A method as claimed in claim 8 wherein retention holes are formed in the lower part of said tooth.

10. A method as claimed in claim 8 wherein following step 10) said tooth is inspected for voids and any such voids are filled with indirect composite material.

11. A method as claimed in claim 10 wherein retention holes are formed in the lower part of said tooth.

12. A method as claimed in claim 10 wherein said tooth is blasted with a fine abrasive and rinsed.

13. A method for manufacturing an artificial tooth for placement in a denture comprising the steps of:

- 1) making a mold of the desired tooth;
- 2) making a mold form of impression material, such as Panasil Contact Plus™ or equal;
- 3) gluing a handle to the mold;
- 4) placing a small layer of impression material on the surface of the tooth mold;
- 5) holding the handle, pushing the mold into the mold form up to the base and leaving the bottom and glue area exposed;
- 6) removing the tooth mold from the mold form after the tooth mold has been in the mold form for at least substantially ten minutes;
- 7) inserting in the mold form a thin layer of an indirect composite incisal material and forcing said material into the contour of the mold;
- 8) cure said thin layer under light;
- 9) repeat step 7 as required until the mold form is filled, adding color as required to each layer to complete the tooth;
- 10) removing the tooth from the tooth mold and placing the tooth in a light-curing oven for nine minutes;
- 11) inspect the tooth for voids or other imperfections and fill any voids with incisal material;
- 12) lightly smooth or buff tooth;
- 13) create retention holes in bottom of tooth;

- 14) lightly blast tooth with white aluminum oxide and rinse in distilled water in ultrasonic cleaner approximately two minutes or steam clean;
- 15) dry tooth and stain if needed;
- 16) seating tooth in curing unit, base side down, and glazed;
- 17) cure in nitrogen atmosphere and light for nine minutes;
- 18) cure in heat-curing oven twenty minutes;
- 19) remove from oven and allow to cool; and
- 20) inspect and buff with chamois wheel, if needed.

14. An artificial tooth for placement in a denture and formed in a mold comprising:

a plurality of layers of indirect composite incisal material, each layer of which is subjected in said mold to a curing process including exposure to vacuum and light-curing steps in an oxygen-free atmosphere; and

a further curing step after removal from the mold including exposure to a vacuum and light-curing step in an oxygen-free atmosphere.

15. An artificial tooth as claimed in claim 14 wherein said tooth includes retention holes for anchoring said tooth to a denture.

16. An artificial tooth as claimed in claim 14 wherein following said vacuum and light-curing step said tooth is blasted with a fine abrasive and rinsed.

17. An artificial tooth as claimed in claim 15 wherein said tooth has a glazed and/or polished surface.